

What I need to know about Peptic Ulcer Disease



National Institute of
Diabetes and Digestive
and Kidney Diseases

National Digestive Diseases
Information Clearinghouse

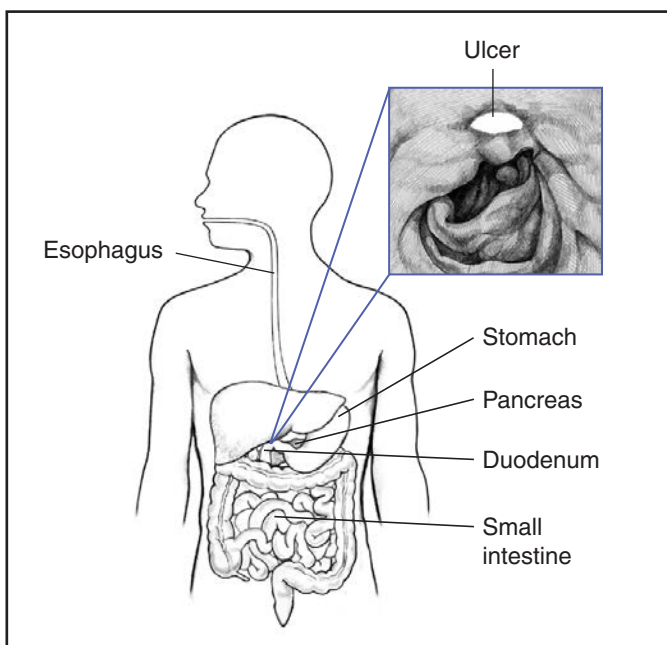
What I need to know about Peptic Ulcer Disease

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What is a peptic ulcer?

A peptic ulcer is a sore in the lining of your stomach or **duodenum**.* The duodenum is the first part of your small intestine. Rarely, a peptic ulcer may develop just above your stomach in your **esophagus**—the organ that connects your mouth to your stomach. Doctors call this type of peptic ulcer an esophageal ulcer.



A peptic ulcer is a sore in the lining of your stomach or duodenum.

*See the Pronunciation Guide for tips on how to say the words in **bold** type.

What causes peptic ulcer disease?

Causes of peptic ulcer disease include

- long-term use of nonsteroidal anti-inflammatory drugs (NSAIDs), a class of pain killers such as aspirin and ibuprofen
- an infection with *Helicobacter pylori* (*H. pylori*), a spiral-shaped bacterium that can damage the lining of your stomach and duodenum
- rarely, tumors in the stomach, duodenum, or **pancreas**

Who gets peptic ulcer disease?

You may be more likely to get a peptic ulcer caused by NSAIDs if you

- are elderly
- are taking more than two NSAIDs
- are taking NSAIDs and aspirin
- have taken NSAIDs regularly for a long time
- have had a peptic ulcer before
- have two or more medical conditions or diseases
- are taking other medicines, such as steroids and medicines to increase bone mass

People who have *H. pylori* may get an *H. pylori*-induced peptic ulcer. However, many people with an *H. pylori* infection never develop a peptic ulcer. Doctors think *H. pylori* may spread through unclean food, water, or eating utensils or through mouth-to-mouth contact, such as kissing.

What are the signs and symptoms of peptic ulcer disease?

A dull or burning pain in your stomach is the most common symptom of peptic ulcer disease. You may feel the pain anywhere between your belly button and breastbone. The pain usually

- happens when your stomach is empty—such as between meals or during the night
- stops briefly if you eat or if you take **antacids**
- lasts for minutes to hours
- comes and goes for several days, weeks, or months

Less common symptoms may include

- bloating
- burping
- feeling sick to your stomach
- poor appetite
- vomiting
- weight loss



A dull or burning pain in your stomach is the most common symptom of peptic ulcer disease.

Even if your symptoms are mild, you may have a peptic ulcer. You should see your doctor to talk about your symptoms. Without treatment, your peptic ulcer disease can get worse.

What other problems can peptic ulcer disease cause?

Peptic ulcer disease can cause other problems, including

- a broken blood vessel in your stomach or small intestine
- a hole in the wall of your stomach or small intestine
- a blockage that can stop food from moving from your stomach into the duodenum

You may need surgery to treat these problems.

When should I call or see my doctor?

You should call or see your doctor right away if you

- feel weak or faint
- have difficulty breathing
- have red blood in your vomit or vomit that looks like coffee grounds
- have red blood in your stool or black stools
- have sudden, sharp stomach pain that doesn't go away

These symptoms could be signs a peptic ulcer has caused a more serious problem.



You should call or see your doctor right away if you have sudden, sharp stomach pain that doesn't go away.

How does my doctor know if I have peptic ulcer disease?

Your doctor will know if you have peptic ulcer disease based on the following:

- medical history
- physical exam
- lab tests
- upper **gastrointestinal (GI) endoscopy**
- upper GI series
- **computerized tomography (CT) scan**

Medical History

Your doctor will ask you to provide your medical history to help diagnose the cause of peptic ulcer disease. Your doctor will ask you questions about your symptoms and the medicines you take. Be sure to mention medicines you take without a prescription, such as Bayer Aspirin, Motrin, Advil, or Aleve. These medicines are all NSAIDs.



Your doctor will ask you questions about your symptoms and the medicines you take.

Physical Exam

A physical exam may help the doctor diagnose the cause of peptic ulcer disease. During a physical exam, a doctor usually

- checks for abdominal bloating
- listens to sounds within the abdomen using a stethoscope
- taps on the abdomen checking for tenderness or pain

Lab Tests

To see if you have an *H. pylori* infection, your doctor will order these tests:

- **Blood test.** A blood test involves drawing a sample of your blood at your doctor's office or a commercial facility. A health care provider sends your blood sample to a lab for analysis.
- **Urea breath test.** For a breath test, you will drink a special liquid that contains a waste product the body makes as it breaks down protein. If *H. pylori* are present, the bacteria will change this waste product into carbon dioxide—a harmless gas. Carbon dioxide normally appears in your breath when you exhale. A nurse or technician will take a sample of your breath by having you breathe into a bag at your doctor's office or at a lab. The nurse or technician then sends your breath sample to a lab for testing. If your breath sample has higher levels of carbon dioxide than normal, you have *H. pylori* in your stomach or small intestine.
- **Stool test.** Doctors use a stool test to study a sample of your stool. A doctor will give you a container for catching and storing your stool at home. You return the sample to the doctor or a commercial facility to be sent to a lab for analysis. Stool tests can show the presence of *H. pylori*.

Upper Gastrointestinal Endoscopy

This procedure involves using an endoscope—a small, flexible camera with a light—to see your upper GI tract, which includes your esophagus, stomach, and duodenum. The doctor performs the test at a hospital or an outpatient center. The doctor carefully feeds the endoscope down your esophagus and into your stomach and duodenum. The small camera built into the endoscope transmits a video image to a monitor, allowing close examination of your intestinal lining. A doctor may give you a liquid anesthetic to gargle or may spray anesthetic on the back of your throat before inserting the endoscope. A nurse will place an intravenous (IV) needle in a vein in your arm to give you a sedative. Sedatives help you feel relaxed and comfortable. This test can show a peptic ulcer.

During the endoscopy, the doctor may also perform a **biopsy**, which involves taking a small piece of tissue for examination with a microscope.

Upper Gastrointestinal Series

The test can provide a look at the shape of your upper GI tract. An x-ray technician performs this test at a hospital or an outpatient center, and a **radiologist**—a doctor who specializes in medical imaging—interprets the images. This test does not require anesthesia. You should not eat or drink

before the procedure, as your doctor will explain. You should check with your doctor about how to prepare for an upper GI series.

During the procedure, you will stand or sit in front of an x-ray machine and drink **barium**, a chalky liquid. Barium coats your esophagus, stomach, and small intestine so your doctor can see the shapes of these organs more clearly on x rays.

You may experience bloating and nausea for a short time after the test. For several days afterward, barium liquid in your GI tract may cause white or light-colored stools. Your doctor will give you specific instructions about eating and drinking after the test.

Computerized Tomography Scan

This procedure uses a combination of x rays and computer technology to create images. For a CT scan, a nurse may give you a solution to drink and an injection of a special dye, called contrast medium. You will lie on a table that slides into a tunnel-shaped device that takes the x rays. An x-ray technician performs the procedure in an outpatient center or a hospital, and a radiologist interprets the images. You do not need anesthesia. CT scans can help diagnose a peptic ulcer that has created a hole in the wall of your stomach or small intestine.

How is peptic ulcer disease treated?

Your doctor will decide the best treatment based on the peptic ulcer's cause. Your doctor may prescribe one or more of the following medicines:

- a proton pump inhibitor, such as Prilosec, or histamine receptor blocker, such as Pepcid AC, to reduce stomach acid and protect the lining of your stomach and duodenum
- one or more **antibiotics** to kill an *H. pylori* infection
- a medicine, such as sucralfate, that coats a peptic ulcer and protects it from stomach acid

Antacids—such as Tums—can't heal a peptic ulcer. Check with your doctor before taking antacids while your peptic ulcer is healing. Some of the antibiotics doctors use to treat an *H. pylori* infection may not work as well if you take antacids. While antacids may make your peptic ulcer pain go away for a while, they won't kill the *H. pylori* bacteria. Only antibiotics can do that.

If an NSAID caused your peptic ulcer, your doctor may tell you to

- stop taking the NSAID
- reduce how much of the NSAID you take
- take a proton pump inhibitor or histamine receptor blocker with the NSAID
- switch to another medicine that won't cause a peptic ulcer

Tell your doctor if the medicines make you feel sick or dizzy or cause diarrhea or headaches. Your doctor can change your medicines.

If you smoke, quit. You also should avoid alcohol. Drinking alcohol and smoking slow the healing of a peptic ulcer and can make it worse.



Check with your doctor before taking antacids while your peptic ulcer is healing.

What if a peptic ulcer doesn't heal?

In many cases, medicines heal a peptic ulcer. If an *H. pylori* infection caused your peptic ulcer, you should finish all of your antibiotics and take any other medicines your doctor prescribes. The infection and peptic ulcer will heal only if you take all medicines as your doctor prescribes.

When you have finished your medicines, your doctor will do another breath or stool test to be sure the *H. pylori* infection is gone. Sometimes, *H. pylori* bacteria are still there, even after you have taken all the medicines correctly. If that happens, your doctor will prescribe different antibiotics to get rid of the infection and cure your peptic ulcer.

Can a peptic ulcer come back?

Yes. If you smoke or take NSAIDs, your peptic ulcer is more likely to come back. If you need to take an NSAID, your doctor may switch you to a different medicine or add medicines to help prevent a peptic ulcer.



How can I prevent peptic ulcer disease?

To help prevent peptic ulcer disease caused by *H. pylori*, your doctor may recommend that you

- wash your hands with soap and water after using the bathroom and before eating
- make sure you wash and cook your food properly
- drink water from a clean, safe source
- avoid drinking too much alcohol



To help prevent peptic ulcer disease caused by NSAIDs, ask your doctor if you should

- stop using NSAIDs
- take NSAIDs with a meal if you still need NSAIDs
- use a lower dose of NSAIDs
- take medicines to protect your stomach and duodenum while taking NSAIDs
- switch to a medicine that won't cause ulcers

Eating, Diet, and Nutrition

Researchers have not found that eating, diet, and nutrition play a role in causing or preventing peptic ulcer disease.

Many people used to think that drinking milk helped a peptic ulcer heal. Doctors now know that while milk may make an ulcer feel better briefly, it also increases stomach acid. Too much stomach acid makes a peptic ulcer worse. Check with your doctor before drinking milk while your peptic ulcer is healing.

Stress and spicy food do not cause peptic ulcer disease. However, they can make your peptic ulcer symptoms worse.

Points to Remember

- A peptic ulcer is a sore in the lining of your stomach or duodenum.
- Causes of peptic ulcer disease include long-term use of nonsteroidal anti-inflammatory drugs (NSAIDs), a class of pain killers such as aspirin and ibuprofen; an infection with *Helicobacter pylori* (*H. pylori*), a spiral-shaped bacterium that can damage the lining of your stomach and duodenum; or, rarely, tumors in the stomach, duodenum, or pancreas.
- Your doctor will decide the best treatment based on the peptic ulcer's cause.
- To help prevent peptic ulcer disease caused by *H. pylori*, your doctor may recommend that you
 - wash your hands with soap and water after using the bathroom and before eating
 - make sure you wash and cook your food properly
 - drink water from a clean, safe source
 - avoid drinking too much alcohol

- To help prevent peptic ulcer disease caused by NSAIDs, ask your doctor if you should
 - stop using NSAIDs
 - take NSAIDs with a meal if you still need NSAIDs
 - use a lower dose of NSAIDs
 - take medicines to protect your stomach and duodenum while taking NSAIDs
 - switch to a medicine that won't cause ulcers
- Stress and spicy food do not cause peptic ulcer disease. However, they can make your peptic ulcer symptoms worse.

Hope through Research

The National Institute of Diabetes and Digestive and Kidney Diseases' (NIDDK's) Division of Digestive Diseases and Nutrition conducts and supports basic and clinical research into many digestive disorders.

Clinical trials are research studies involving people. Clinical trials look at safe and effective new ways to prevent, detect, or treat disease. Researchers also use clinical trials to look at other aspects of care, such as improving the quality of life for people with chronic illnesses. To learn more about clinical trials, why they matter, and how to participate, visit the NIH Clinical Research Trials and You website at www.nih.gov/health/clinicaltrials. For information about current studies, visit www.ClinicalTrials.gov.

Pronunciation Guide

antacids (ant-ASS-idz)

antibiotics (AN-tee-by-OT-iks)

barium (BA-ree-uhm)

biopsy (BY-op-see)

computerized tomography scan (kom-PYOO-tur-
eyezd) (toh-MOG-ruh-fee) (skan)

duodenum (doo-OD-uh-nuhm)

esophagus (uh-SOF-uh-guhss)

gastrointestinal endoscopy (GASS-troh-in-TESS-
tin-uhl) (en-DOSS-kuh-pee)

Helicobacter pylori (HEL-uh-koh-BAK-tur)
(py-LOR-eye)

pancreas (pan-kree-us)

radiologist (RAY-dee-OL-uh-jist)

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